

Illinois Environmental Protection Agency

2200 Churchill Road, Springfield, Illinois 62706



MEMORANDUM

DATE: May 31, 1979
TO: Division File
FROM: John Taylor
SUBJECT: Macon County - LPC 11580408 - Decatur/Macon County #2

RECEIVED

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E.P.A. - D.L.P.C.
STATE OF ILLINOIS

The Macon County Landfill site was inspected on April 18, 1979 by John Taylor. The purpose of the inspection was to determine the site's suitability for the continued acceptance of special wastes. The site was observed to be in violation of the Act, the Rules, and certain conditions of the permit at the time of the inspection. The conditions observed at this site warrant the denial of any future applications for supplemental special waste permits for several reasons.

The "Hydrologic and Geologic Report", submitted as part of the original permit application, casts doubt on this site's suitability for disposal of special wastes. The attached chart, adopted from soil profiles in this report, show that there is a great deal of sand and silt present that will necessarily have to be used for daily and intermediate cover. Once site development reaches the point at which the drainage culvert under the dike is properly plugged and sealed this might not be a major concern. At that time all contaminants would be contained within the seal and the dike. However, until that point is reached, any liquid build up in the filled areas may easily flow through the porous cover materials, drain into the surface water drainage channels, and leave the site through the culvert. This situation appears to have existed for several years. According to the permit, the seal along the north and west sides of the site will not be constructed and the culvert, if it still existed, would not have been plugged until late in the life of this site.

This culvert was added to the site's plan by Supplemental Permit No. 76-203, issued April 14, 1976, which modified the existing Developmental Permit No. 1976-4-DE. The culvert was to allow a means for surface water drainage from the site but at the same time protect against inundation by flood waters through the use of a flapper valve at the south end of the pipe. It has since been removed and a 15 foot slot was cut through the berm. The necessity of protecting the site against flooding was proven this spring. Sangamon River flood waters reached an elevation of approximately 612 feet, about 3 feet below the top of the berm. The waters covered nearly one-third of the site, including some filled areas.

EPA Region 5 Records Ctr.



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Also a drainage ditch was to have been constructed to channel surface water from north of the site around the landfill to the west. This appears to have never been done. The waters from the pipe under Hill Road flow into the pond in the southwest part of the site. The developmental permit for the Macon County #3 site, Permit No. 1978-7-DE, calls for a storm sewer through the middle of this site from the culvert under Hill Road straight south to the approved location of the culvert through the berm. There may be problems with this as it will pierce the seal at the north end as well as the dike in the south. It appears that they plan to lay the pipe right through Areas II and III after they are filled. This does not appear to be a sound practice.

Special Condition No. 3 of Operating Permit No. 1976-4-OP, issued June 17, 1976, stated that:

"In order to insure the following:

- a. That there is a minimum of ten feet of undisturbed clay between the bottom of the excavation and any permeable sand or silt layer, or
- b. That any permeable sand or silt seam encountered in either the side walls or in the bottom of the excavation shall be over excavated and sealed with a minimum thickness of ten feet of on-site clay, compacted in two foot layers to a density of 95% proctor,

A construction inspection report attesting to (a) and (b) above, signed by a registered professional engineer shall be submitted to the IEPA after each trench is completed and before any solid waste is deposited in the trench". Approximately one-third of the site has been filled and a review of the Central Region file revealed no construction inspection reports regarding soils underlying Area I or anywhere else.

It appears that the southeast area of the site may have been overfilled and now exceeds final elevations. This will have to be field checked at a later date.

It appears that this site is not suitable for the environmentally safe disposal of special wastes. Leachate has been observed in areas somewhat remote from the filled areas of the site suggesting the migration of contaminants. Major changes will have to be made if the site is to again be suitable for special waste disposal. The following changes will be necessary:

- a. The seal around the north and west sides of the site will have to be completed.
- b. The dike will have to be properly repaired.
- c. The culvert through the dike will have to be eliminated so as to contain all surface water on the site as it is usually contaminated due to leaching from the filled areas.
- d. The drainageway in the northwest corner of the site will have to be properly constructed so as to divert surface water from north of the site around the fill area.

Construction inspection reports will have to be submitted certifying that all of the above items are properly completed as well as certifying that there is an adequate layer of clay under the fill area excavations.

Once all of the above-mentioned items have been successfully completed and certified, this site may again be suitable for special waste disposal. Until that time, no supplemental special waste permits should be issued to this site.

JT:mad/7231/9-11

cc: Central Region
Land FOS Manager
Land Permit Section
Manager, Hazardous Waste Unit

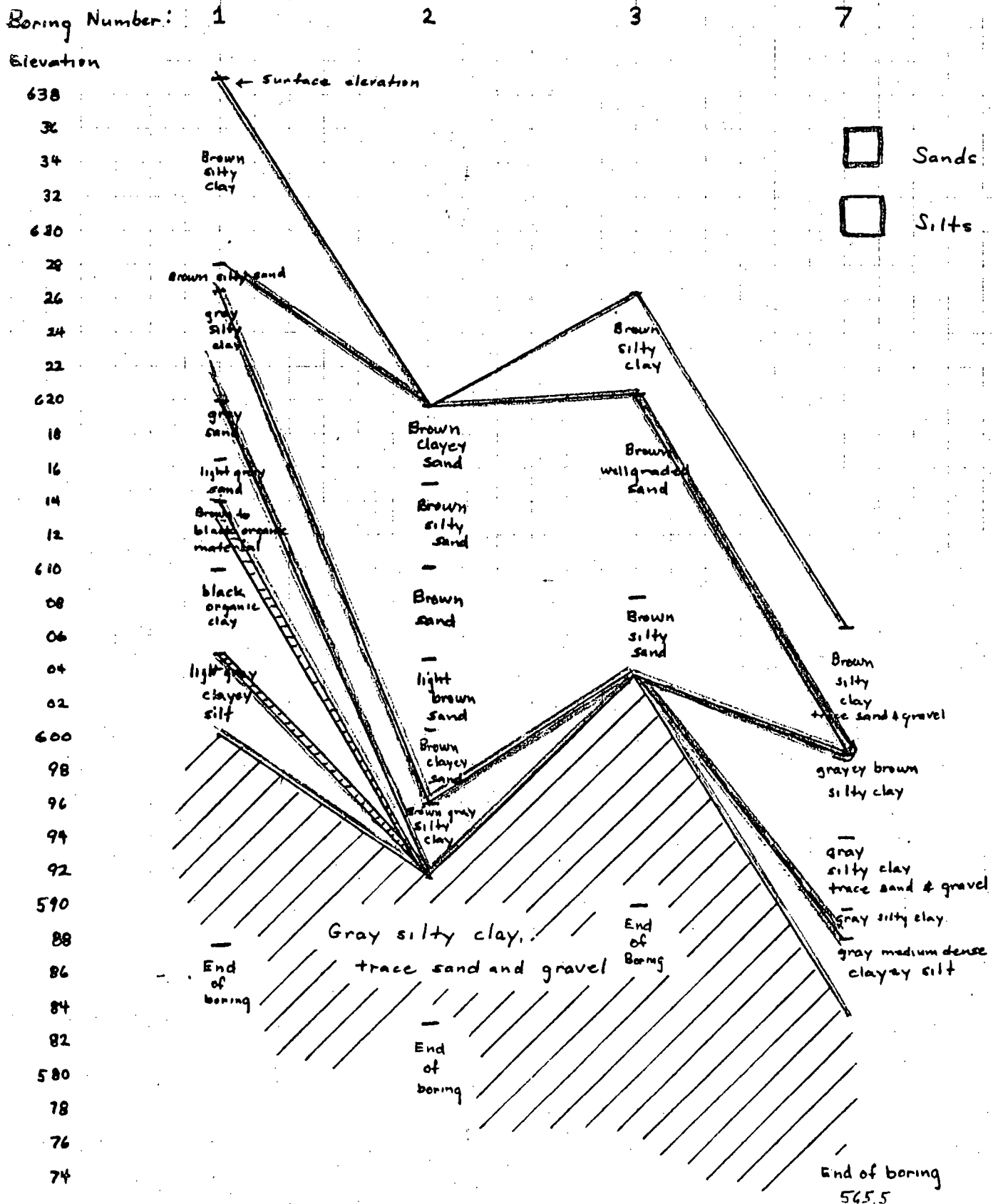
STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

Subject Macon County - LPC 115B0408

Date Decatur / Macon County #2

Reviewed by _____

Date April 18, 1979



Macon County

LPC

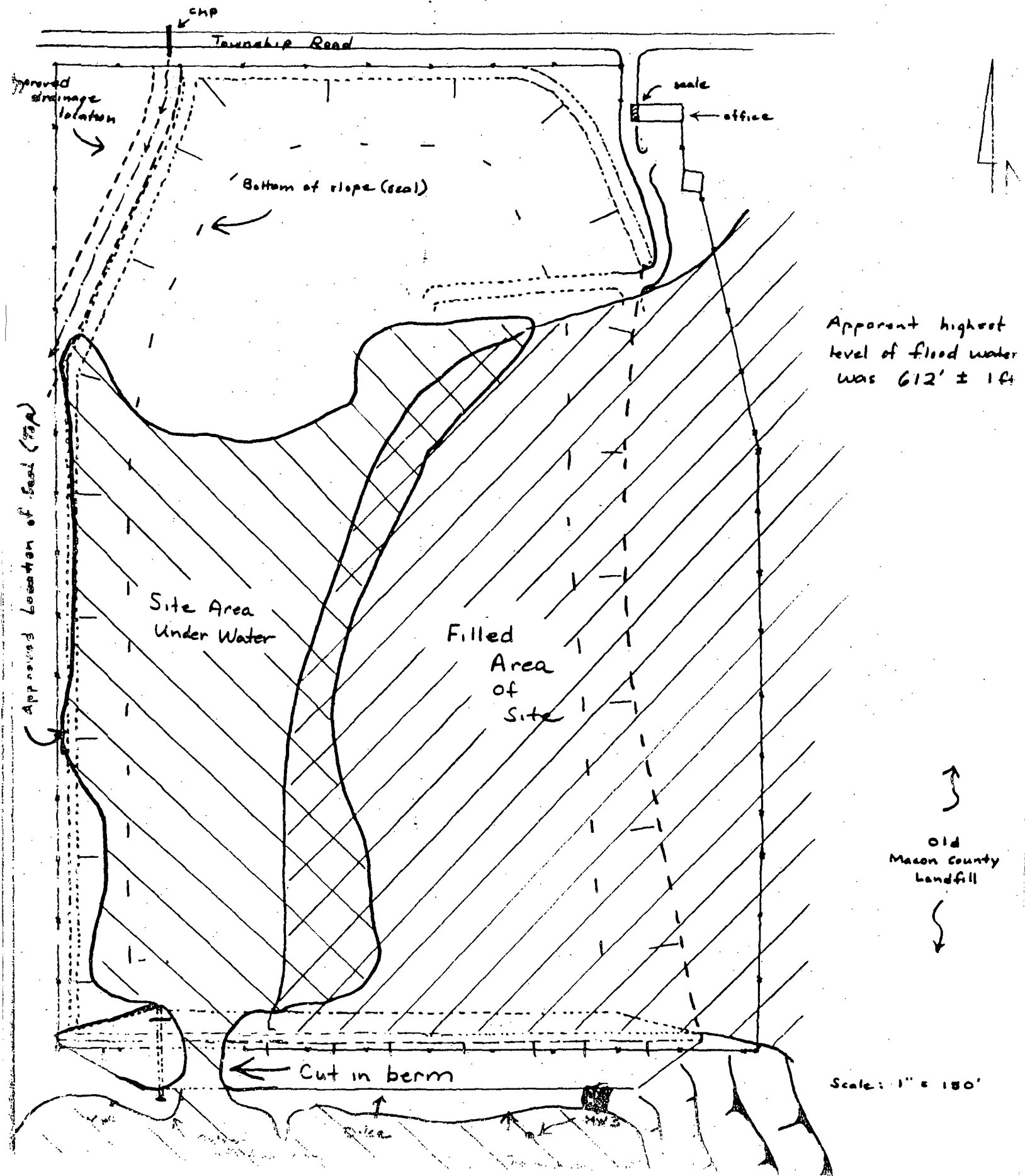
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